# The Engagement of Visual Novel Digital Game Entitled Single Mingle: Career versus Marriage

## Siti Nur Farah Natasha Azhar, Erni Marlina Saari[*], Norshahila Ibrahim, Fadhlina Mohd Razali, Noor Hidayah Azmi

*Faculty of Art, Computing and Creative Industry, Universiti Pendidikan Sultan Idris; farahnat97@gmail.com.my
{marlina, shahila, fadlina, hidayah}@fskik.upsi.edu.my*

*\*Correspondence author*

**Abstract**

This study is about the development of a Visual Novel game "SINGLE MINGLE: Career vs Marriage". The game project focused on developing the game individually either in 2D or 3D. This game is created fully in 2D with its own message to be delivered. The objective of this study is to show the process of game development which can be used to solve several current issues that were chosen during pitching. This paper is to focus on the purpose and creation of the game "SINGLE MINGLE" from the very beginning. The project phases are divided into three main phases which include pre-production, production, and post-production. Marketing items such as posters and merchandise were designed and digitalized in the post-production phase. The affirmative end product from the players shows that in spite of single or married ladies, this game really makes them engaged because of the appealing game design interface and interesting gameplay.

**Keywords:** game, digital game, visual novel, career, marriage

## INTRODUCTION

"Single" is a word that is described as one, alone, or even a spouseless person. People are now living in an advanced world that focuses much on success, technology, and money. While being single in marital status is preferred by people who chase success, it is a trend that is not welcomed by the elderly in a certain country, including Malaysia, as stated by Alwi and Lourdunathan (2020). Since some women aim to be independent and successful, they tend to avoid or delay their love life to focus on their dreams (Ismail et al., 2020). This can cause problems to their health later in life, physically and

mentally. Late marriage can lead to another problem too.

Therefore, to prevent a worse scenario from happening in society, SINGLE MINGLE: Career vs Marriage is a female-oriented Visual Novel (VN) game about a 27-year-old flight attendant who needs to find her love interest, managing her career life, and withstanding the pressure from society for late-marriage. The game encourages women to be successful in both career and love life. Handling both career and love life can be hard, but it is not impossible.

**Research Background**

When talking about marriage and career, people used to think about gender and their role. There is a stereotype thinking in Asian elderly that men should go to work and find money to support their family, while women should only stay at home doing house chores. This type of thinking has too many bad implications and can burden one life as if they have no preparation for any bad possibility.

*Marriage* - Marriage is a formal union of a man and a woman, which will then become a husband and a wife. They will live their life together, supporting each other and have their back covered. But some people do not even bet an eye and ignore the fact that marriage brings more benefit than they have ever known (Wang & Kim, 2014).

*Career* - Marriage is important to an individual and society, so does a career. Career helps people to manage life better, financially. It is almost impossible for an individual to live without a career and job unless they have a financial supporter. El-Mubarak and Ogunbado (2017) stated that adopting career life before marriage for women is to serve as a means to stabilize their situation after the death of their husband or in a worse case, divorce. It can also become an investment to manage their household later for a long-term period. Meanwhile, men, need to have a career to attract the opposite gender since Wang and Kim (2014) stated that "78% of never-married women say it is very important for a potential partner to have a steady job".

*Late Marriage* - The reasons why many Malaysians, men, and women, delayed their marriage are because they wanted to complete their studies, adopting work before marriage, high dowry charge, lack of courage, and incapability of discharging marital responsibility. There are several consequences of late marriage too such as religious problems, psychological problems, and the problem of spreading fornication and rape acts by El-Mubarak and Ogunbado (2017).

**LITERATURE REVIEW**

Digital games or video games can be defined as "any forms of computer-based entertainment software, either textual or image-based, using any electronic platform such as personal computers or consoles and involving one or multiple players in a physical or networked environment" (Frasca, 2001). They provide many benefits as nowadays; people tend to rely on technologies for almost everything. The

vast development of technologies made almost everything possible. According to Sezgin (2018), the digital games industry is one of the fastest-growing creative industries even though it is only been 40 years since its first existence.

*PC Game* - PC stands for personal computer, and the game is entertainment either for casual or professional purposes. While according to Cambridge Dictionary (2013), a PC game is "a game that is played on a computer, in which the pictures that appear on the screen are controlled by pressing keys or moving a joystick".

*Visual Novel Game* – The very first game for VN game genre is still unknown, but some of the earliest VN games were erotic games. Night Life and Seduction of the Condominium Wife ("Danchi Tsuma no Yūwaku"), developed by Koei was released in 1982. Other now-famous game companies such as Enix, Square, and Nihon Falcon follow the very same footsteps in the early 1980 before they became famous.

The origins of the VN game genre are quite to the dark side, but people start seeing the potential in the genre hence making better games to improve the image of the genre. They start making subgenre for VN games to attract more players with different interests. In 1983, Enix released The Portopia Serial Murder Case ("Portopia Renzoku Satsujin Jiken"), an adventure VN game. Player needs to resolve a murder mystery by opening conversations with the non-playable characters (NPCs) to search for clues. VN games, or usually shortened as VN games, are games that focus more on the storyline and art style rather than the gameplay. "It is usually composed of images with texts, sounds, music, and even voice to add more dramatic effects in the game. It is a story-driven game with gameplay which is extremely minimal; by simply clicking to keep the game moving" (Agos et al., 2013; Andrew et al., 2019). The simple gameplay and strong storyline make them popular among female players. The lack of interaction between the player and the medium makes people argue whether it could be considered a game or not.

*Characters* - Characters play an important role in the VN game genre as they are one of the reasons why the genre is popular. From the designs to the personalities, the characters can be the reason for the success and failure of a VN game. According to research conducted by Sung et al., (2015), based on the following Figure 1, 32 out of 78 respondents considered the game narrative and storyline as the most important element in the genre, and 30 respondents considered character design and illustration as the second most important. It is essential to note that to create a good VN game, a developer needs to consider the most important elements according to the players, stated Andrew et al., (2019). This is to ensure that the game could reach its optimum potential and is acceptable by the VN game community.
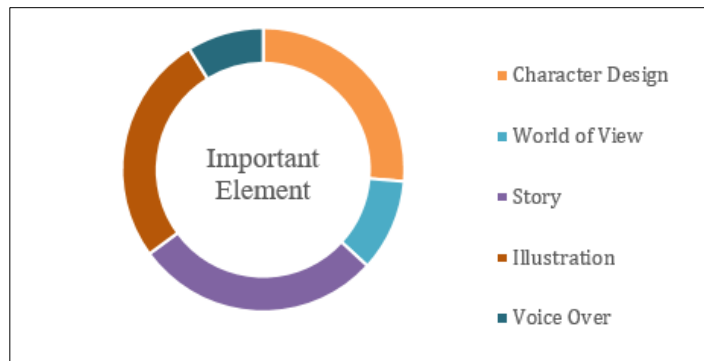
**Figure 1:** Important elements in Visual Novel games according to the respondents

The characters that can be found in a VN game usually have different characteristics, personalities, and attitudes. From the way they dressed up to the way they speak, most of them are created to be different from the other characters in the story. Some VN games also provide a backstory for each character so that the player can connect themselves to the characters. Attachment can lead to love. This could help the players to go through their rough days because "the world can't function properly without love" (Jusoh, 2019).

SINGLE MINGLE is a VN game with otome game as its subgenre. Otome games are "considered a niche category of games that originated from Japan that is produced and marketed specifically to women" (Ganzon, 2018). They are designed mainly for female players. Although 'otome' means girls, this genre is quite popular even among women.

**METHODOLOGY**

A game is a product that needs to go through a lot of phases before it could reach its consumer. It can be in digital or board form. Many would spend their money if the product is good and worth every penny. The process to a complete game is not as easy as it seems. From researching, planning, designing, developing, analysing, to marketing, every phase requires a lot of attention to make the game a success. These phases were divided into three as shown in Figure 2: pre-production, production, and post-production (Ryan, 2010). Shortly, SINGLE MINGLE will go through all three phases to complete just like any other project.

SINGLE MINGLE initial objective was for single ladies above 27 years old about managing career life and living their single life to the fullest, but with toxic opinions of "leftover ladies" in the society. No romance would be included at first, but after consulting with an expert, from UPSI, stated that a person could live better with love.

SINGLE MINGLE applied the waterfall development process which is simplified into three phases: pre-production, production, and post-production. The process flows from one phase to the next phase, step by step, according to the plan made at the very beginning. This is to keep track of the whole process to go smoothly and make sure that the project is completed by the estimated time. If problems were to occur in the previous phase, the developer may go back and fix the problem easier.
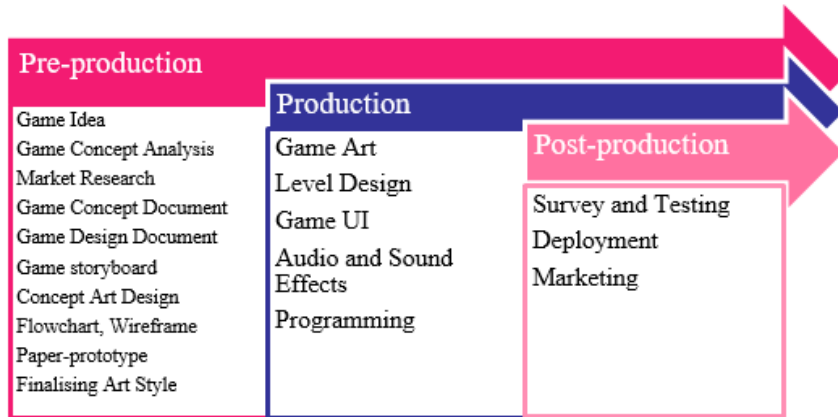
**Pre-production**

Game Idea
Game Concept Analysis
Market Research
Game Concept Document
Game Design Document
Game storyboard
Concept Art Design
Flowchart, Wireframe
Paper-prototype
Finalising Art Style

**Production**

Game Art
Level Design
Game UI
Audio and Sound Effects
Programming

**Post-production**

Survey and Testing
Deployment
Marketing

**Figure 2:** The three phases used in SINGLE MINGLE project

**Pre-Production Method**

Pre-production consists of planning, analysing, documentation, and an early sketch of the designs for the project. Documentation is important to "communicate the vision in sufficient detail to implement it" (Ryan, 2010). Good project documentation can ensure the project flows smoothly as it is more organized to be supervised and track issues.

**Production Method**

Production consists of the development process of a project such as digitalizing all final assets and programming. However, during this stage, the developer could still go back to the pre-production stage for fixing, but not encouraged as this will lead to overdue.

**Post-Production Method**

Post-production consists of steps after the development process of a project are done. This includes playtesting, marketing, and promoting the finished product. SINGLE MINGLE has its game poster, infographic poster, merchandise, standee, trailer, and walkthrough videos.

Figure 3 and 4 are the example of screens in this game. The 2D approach was used for the entire gameplay. The characters that can be found in a VN game usually have different characteristics, personalities, and attitudes. From the way they dressed up to the way they speak, most of them are

created to be different from the other characters in the story. This could help the players to go through their rough days because "the world cannot function properly without love" (Jusoh, 2019).



**Figure 3:** The main screen in SINGLE MINGLE project



**Figure 4:** The selected screen in SINGLE MINGLE project

Figure 5 showed the sketches for the interactive buttons available for this game and figure 7 showed the final design for it. Meanwhile, figure 6 displayed the design some of the characters available in the game.
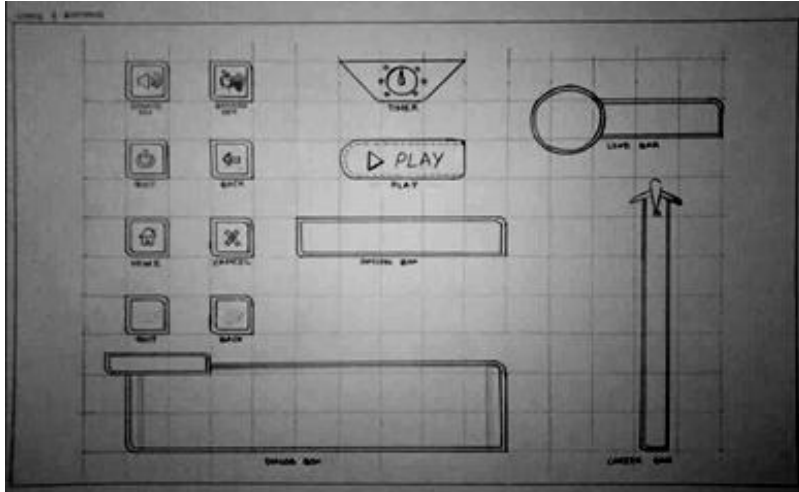


**Figure 5:** The scratch for the GUI design for interactive buttons



**Figure 6:** Example of early character design (Zaria, The Main Character)
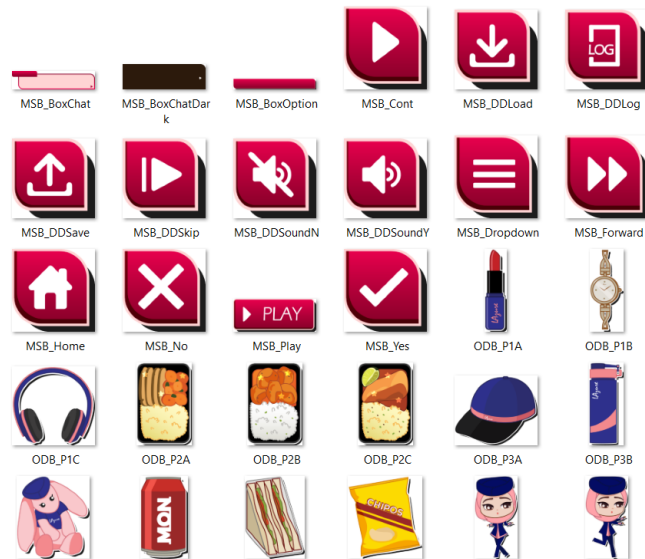
**Figure 7:** Example of GUI designs for the game

## PLAYTESTING RESULTS

Playtesting is one of the most important steps in developing a game with quality. Developers can gather so much information about play testers' experience on their game through a playtesting session, thus making debugging and game enhancement easier. Thus, a SINGLE MINGLE playtesting session was held for a few days to collect data on the game performance.

*Testing* - According to Mirza-Babaei, Moosajee and Drenikow (2016), playtesting is designed to help developers achieve their design goals and make things easier to identify and resolve potential errors during development. The developer also performs playtesting during the entire design process from time to time to gain information on whether or not the game is meeting the expectations of the player (Fullerton, 2016). This will make the game better by time as they will get more and more insight from play testers, making sure every flaw of the game is fixed before the game completion.

*Game Testing* - Game testing is usually divided into two stages; alpha and beta testing. Alpha testing is usually conducted at the developers' place and includes both the white box testing and black-box testing methods. The white box testing was performed by people inside the organization, developers that know the internal working of a game development process, while black box testing was performed by people outside of the development process, the end-users. On the other hand, beta testing is conducted at the end users' place, using only the black box testing method. Normally, the beta testing is organized in public places to gather a large number of end-users more effectively. The play testers

in beta testing usually give their opinions on the external expectation of the game.

*Findings from Playtesting* - A Mann-Whitney U test reveals a statistically significant difference between male and female play testers in the perception towards 'making SINGLE MINGLE do exactly what you want to do is simple', $z = -1.757$, $p = .079$ (see Table 1). All of the male play testers agreed (Mode = Agree) that making SINGLE MINGLE do exactly what they want to do is simple, while some female play testers were still hesitating about it.

**Table 1:** Significant Gender Difference towards the Helpfulness of SINGLE MINGLE

**Gender \* Making SINGLE MINGLE do exactly what you want to do is simple. Crosstabulation**

Count

| | | Making SINGLE MINGLE do exactly what you want to do is simple. | | | |
|---|---|---|---|---|---|
| | | Agree | Undecided | Disagree | Total |
| Gender | Male | 6 | 0 | 0 | 6 |
| | Female | 4 | 3 | 0 | 7 |
| Total | | 10 | 3 | 0 | 13 |

**Test Statistics**

| | Making SINGLE MINGLE do exactly what you want to do is simple. |
|---|---|
| Mann-Whitney U | 12.000 |
| Z | -1.757 |
| Asymp. Sig. (2-tailed) | .079 |
| Exact Sig. [2*(1-tailed Sig.)] | .234[b] |

a. Grouping Variable: Ethnicity
b. Not corrected for ties.

A Mann-Whitney U test also reveals a statistically significant difference between male and female playtesters in the perception towards 'moving from one part of a task to another is relatively easy', $z = -1.757$, $p = .079$ (refer Table 2). All of the male playtesters agreed (Mode = Agree) that moving from one task to another is easy, while some female playtesters were still hesitating about it again.

**Table 2:** Significant ethnicity Difference towards the Helpfulness of SINGLE MINGLE

**Gender * Moving from one part of a task to another is relatively easy. Crosstabulation**

Count

| | | Moving from one part of a task to another is relatively easy. | | | |
| --- | --- | --- | --- | --- | --- |
| | | Agree | Undecided | Disagree | Total |
| Gender | Male | 6 | 0 | 0 | 6 |
| | Female | 4 | 3 | 0 | 7 |
| Total | | 10 | 3 | 0 | 13 |

**Test statistics [a]**

| | Moving from one part of a task to another is relatively easy. |
| --- | --- |
| Mann-Whitney U | 12.000 |
| Z | -1.757 |
| Asymp. Sig. (2-tailed) | .079 |
| Exact Sig. [2*(1-tailed Sig.)] | .234[b] |

a. Grouping Variable: Ethnicity
b. Not corrected for ties.

Mann-Whitney U test reveals a statistically significant difference between male and female playtesters in the perception towards 'the design for the buttons and interface are acceptable', $z = -1.743$, $p = .081$ (refer Table 3). All of the male playtesters agreed (Mode = Agree) that the design for the buttons and interface was acceptable, while some female playtesters were still hesitating about it, and one female playtester disagrees with the statement.

**Table 3:** Significant ethnicity Difference towards the Helpfulness of SINGLE MINGLE

**Gender * Moving from one part of a task to another is relatively easy. Crosstabulation**

Count

| | | Moving from one part of a task to another is relatively easy. | | | |
| --- | --- | --- | --- | --- | --- |
| | | Agree | Undecided | Disagree | Total |
| Gender | Male | 6 | 0 | 0 | 6 |
| | Female | 4 | 2 | 1 | 7 |
| Total | | 10 | 2 | 1 | 13 |

**Test statistics [a]**

| | Moving from one part of a task to another is relatively easy. |
| --- | --- |
| Mann-Whitney U | 12.000 |
| Z | -1.743 |
| Asymp. Sig. (2-tailed) | .081 |
| Exact Sig. [2*(1-tailed Sig.)] | .234[b] |
| a. Grouping Variable: Ethnicity | |
| b. Not corrected for ties. | |

## DISCUSSION

SINGLE MINGLE is a Visual Novel game focusing on unmarried career women which sometimes became a hot topic every once in a while. Sometimes people are too scared to open up their hearts, hence refused to find a suitable partner. The issue of late marriage may seem small and unimportant, but it will bring a lot of consequences in the future. So, the game will resolve this issue slowly through SINGLE MINGLE.

Although the game was not as grand as the other popular games from another genre, SINGLE MINGLE surely make an impact on the players, be it big or small. The game was created to give players the courage they need to move forward and open up their hearts, become successful spiritually, mentally, and physically.

Nowadays, generation Y and Z tend to prioritize education and career. Some are too comfortable with their life that they refuse to get married, but marriage is a request from the creator of heaven and earth to His creatures to fulfil during their existence in life. So, SINGLE MINGLE was created to raise awareness about balancing career and marriage.

## CONCLUSION

Marriage is a natural act with two goals. One is to achieve peace and tranquillity, and the second is as a continuation of the human race. In Islam, marriage is a dear deed to God and is consistent with human nature. It is also important to mention that the Prophet (s) said, "When a man marries, he has protected half of his religion". This emphasizes the fact that marriage protects Muslim's faith and makes a better society. SINGLE MINGLE: Career vs Marriage is finally complete. The development process is a series of iterations, where game designers, pedagogy experts, content experts, programmers, and game artists went through several iterative negotiations, discussions, and compromise situations, before feat a mutual optimized design of the game. According to the results from playtesting, the game can be concluded as a success since it was getting positive feedback from the respondents. Ups and downs during the whole process, from the beginning to the end. The development of the game was indeed challenging as too many things happened in the year 2020, but all's well that ends well.

## ACKNOWLEDGEMENTS

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